

What is claimed is:

1. A method, comprising:
 - receiving, at a subscriber interface line card, an analog signal from a POTS subscriber loop circuit;
 - quantizing the analog signal into a plurality of digital samples;
 - encoding, via high-quality audio codec instructions running on a digital signal processor installed on the subscriber interface line card, the plurality of digital samples; and
 - converting, via conversion instructions running on the digital signal processor, the encoded plurality of digital samples into a plurality of VoATM packets.
2. The method of claim 1, wherein the high-quality audio codec instructions are compatible with G.722.
3. The method of claim 1, wherein the high-quality audio codec instructions are compatible with ITU G series codecs.
4. The method of claim 1, wherein the high-quality audio codec instructions are compatible with Dolby Digital AC-3.
5. The method of claim 1, wherein the high-quality audio codec instructions are compatible with DTS.
6. The method of claim 1, wherein said encoding encodes multiple channel audio.
7. The method of claim 1, further comprising:
 - automatically substituting PCM codec instructions for the high-quality audio codec instructions when a far-end CPE does not have high-quality audio codec capability.

8. The method of claim 1, further comprising:

automatically substituting alternative high-quality audio codec instructions for the high-quality audio codec instructions.

9. The method of claim 1, further comprising:

automatically substituting alternative high-quality audio codec instructions for the high-quality audio codec instructions based on a capability of a far-end CPE.

10. The method of claim 1, further comprising:

automatically substituting alternative high-quality audio codec instructions for the high-quality audio codec instructions based on a capability of a far-end CPE's subscriber interface line card.

11. The method of claim 1, further comprising:

automatically substituting alternative high-quality audio codec instructions for the high-quality audio codec instructions based on a capability of a network coupled to the subscriber interface line card.

12. The method of claim 1, further comprising:

automatically substituting POTS audio codec instructions for the high-quality audio codec instructions.

13. The method of claim 1, further comprising:

automatically substituting POTS audio codec instructions for the high-quality audio codec instructions based on a capability of a far-end CPE or subscriber interface line card.

14. The method of claim 1, further comprising:

signaling between the subscriber interface line card and a far-end subscriber interface line card.

15. The method of claim 1, further comprising:
signaling between the subscriber interface line card and a far-end CPE.
16. The method of claim 1, further comprising:
obtaining a capability of a far-end subscriber interface line card or CPE.
17. The method of claim 1, further comprising:
providing a capability of the subscriber interface line card to a far-end subscriber interface line card or CPE.
18. The method of claim 1, further comprising:
exchanging capability information with a far-end subscriber interface line card or CPE.
19. A machine-readable medium storing instructions for activities comprising:
receiving, at a subscriber interface line card, an analog signal from a POTS subscriber loop circuit;
quantizing the analog signal into a plurality of digital samples;
encoding, via high-quality audio codec instructions running on a digital signal processor installed on the subscriber interface line card, the plurality of digital samples; and
converting, via conversion instructions running on the digital signal processor, the encoded plurality of digital samples into a plurality of VoATM packets.
20. A system, comprising:
a POTS subscriber interface line card adapted to receive an analog signal from a POTS subscriber loop circuit and quantize the analog signal into a plurality of digital samples;
high-quality audio codec installed on the subscriber interface line card, adapted to run on a digital signal processor coupled to the POTS subscriber interface line card, and adapted to encode the the plurality of digital samples; and

a converter installed on the subscriber interface line card and adapted to convert the encoded plurality of digital samples into a plurality of VoATM packets.